MSD

October 20, 1998

Ms. Liza I. Montalvo
Remedial Project Manager
Kentucky/Tennessee Section
U. S. EPA, Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: Results of Air Quality Monitoring - FY99 First Quarter (FY91-1Q),
Lees' Lane Superfund Site, Jefferson County, Kentucky
Administrative Order on Consent, U. S. EPA Docket No. 91-32-C

Dear Ms. Montalvo:

In accordance with paragraph 11, under, Reporting Requirement, of the subject Consent Order and Attachment I, Operation and Maintenance Plan for Post-Removal Site Control at the Lees' Lane Landfill Site, Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by Radian Corporation, P. O. Box 13000, Research Triangle Park, North Carolina 27709, and received by MSD on October 16, 1998.

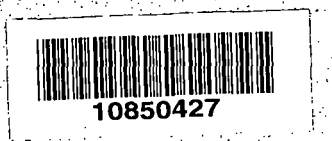
1. Radian Corporation letter, dated October 8, 1998, 2 pages.

2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.

3. Table 1, TO-14 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: September 8, 1998, 1 page.

4. Table 2, On-Site Meteorological Data, Sampling date, September 8, 1998, 1 page.

5. Table 3, TO-14 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Louisville, KY, Sampling Date, September 8, 1998, 1 page.



Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street Louisville, Kentucky 40203-1913 502-540-6000

Please advise if you have any questions concerning the attached information.

Sincerely,

Carl A. Neumayer
Director of Operations.

CAN/dc
Lee'sair1Q99

cc: Mr. Jeff Pratt, KNREPC,
Division of Waste Management
Mr. Rick Hogan, KNREPC
Division of Waste Management
G. R. Garner, Executive Director
File: WD-2 (Lees' Lane M & M Quarterly)

RADIAN INTERNATIONAL
A DAMES & MOORE GROUP COMPANY

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October 8, 1998

Mr. Dan Sammons
Chief Chemist
Louisville Metropolitan Sewer District
4522 Algonquin Parkway
Louisville, KY 40211

Dear Dan:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on 9 September 1998 (Quarter 24).

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary for the ambient sample with the primary analytes required for submission to EPA. All ambient air samples indicate low levels of the primary analytes at a reduced level compared to the last reporting quarter. Quality control data from the field blank and laboratory replicates are of good quality.

The monitoring sites for the collection were chosen based on a combination of prevailing on-site meteorology and available sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were mild (55-70 F) with light north-northwest wind during the majority of the sampling day. Meteorological data readings on-site were not available, therefore the information displayed in Table 2 was obtained from the Louisville Airport National Weather Service Station. The ambient samples were collected 3-5 feet above ground level. The ambient samples collected were integrated over a 7-hour collection period in Summa® canisters.

The methane analysis was performed by GC/FID on a separate analytical system from the TO-14 analysis at Radian's Austin Laboratory. The TO-14 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total nonmethane hydrocarbons prior to field deployment. All thirteen (13) planned field samples were successfully collected and analyzed for methane and the TO-14 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal Radian and project-required specifications.

The reliability of this data set can be characterize as good quality data, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels (acceptable) and the relatively few number of unresolved interfering peaks in the sample chromatograms. The field blank canister

reported positive hits for methylene chloride (1.05 ppb), propylene (31.06 ppb) and benzene (0.023 ppb), and methane (1.1 ppmv). The field blank levels are higher than the laboratory blank levels in this sample set. While the reported levels are not a major concern, we are evaluating further our present field blank procedure to identify a possible source, as we would like to see the field blank equal to the laboratory blank levels. The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The gas monitoring wells were screened with portable survey type instruments prior to field sample collection. The portable survey instruments were utilized and reported elevated methane levels for Well G-1. The laboratory reported methane values for Well G-1 this quarter are still high 2.08 %, but improved from the last monitoring period. This sample was analyzed in the laboratory by TCD for proper quantification. Both wells G-1 and G-2 reported elevated levels of methylene chloride (23.2 ppbv and 17.6 ppbv) respectively.

Radian appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

c: M. McCoy, Radian/RTP
Project File/Task 25

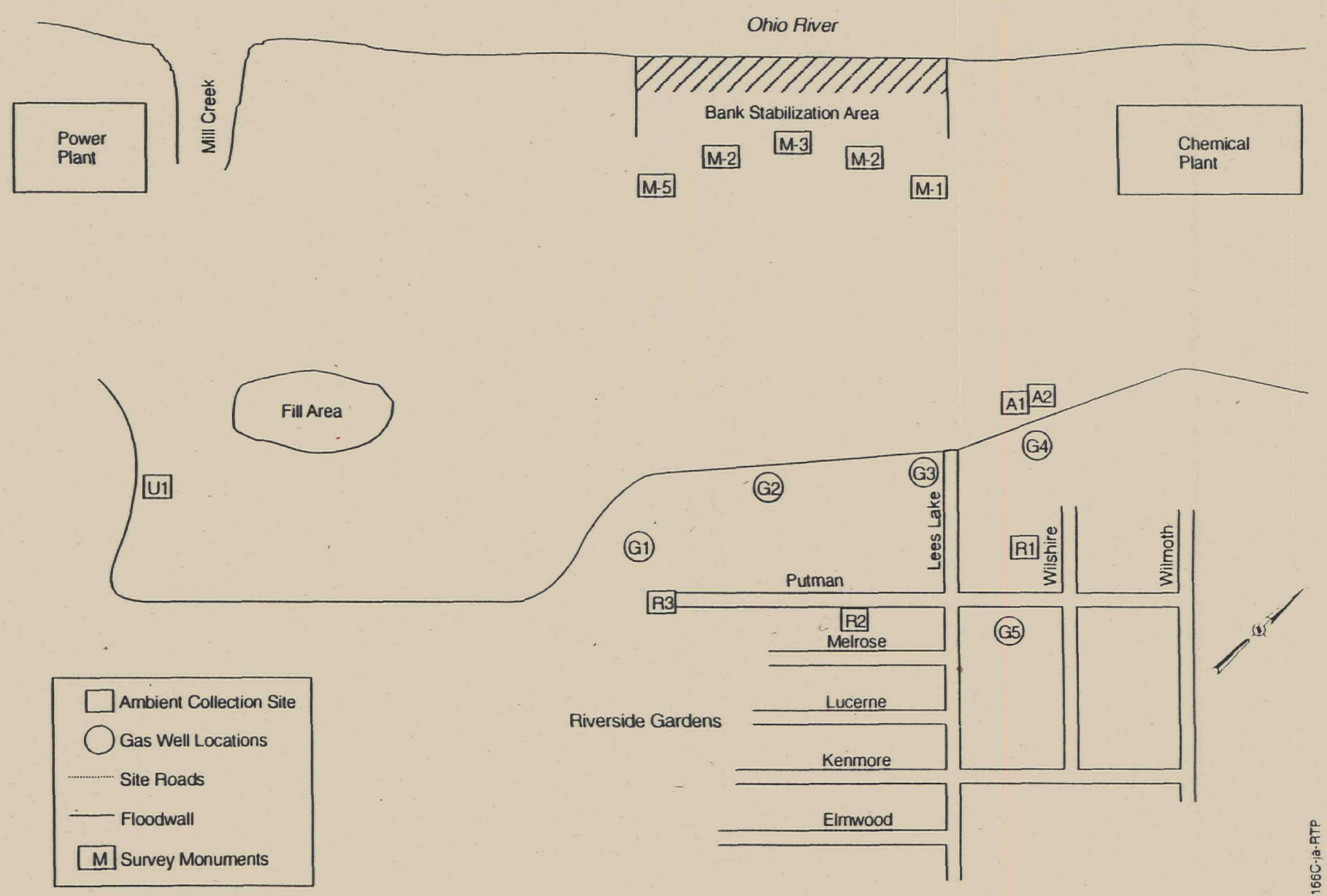

Figure 1. Lees Lane Landfill Sampling Locations

TABLE 1

TO-14 DATA SUMMARY FOR AMBIENT AIR SAMPLES AT THE LEE'S LANE LANDFILL LOUISVILLE, KENTUCKY

SAMPLING DATE: 8 September 1998

	Ambient Air Samples					
Sample ID	U1	A1	A2	R1	R2	R3
Canister ID	RA2033	RA2031	RA2029	RA2034	RA2032	RA2115
Dilution Factor	0.2832	0.2727	0.2501	0.2821	0.2600	0.2556
Location	Upwind	On-site	On-site (dup)	Residential	Residential	Residential
Veriflow ID	A138513	A168514	A134133	A134135	A176658	A176657
Compound (ppbV)						
Benzene	0.42	0.28	0.36	0.33	0.29	0.55
Methylene chloride	1.13	0.48	1.59	0.31	0.81	1.04
Toluene	1.66	1.43	6.96	2.66	1.82	3.51
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.34	0.19	0.63	0.24	0.22	0.41
Methane (ppmV)	5.14	5.77	5.92	5.22	6.63	5.94

TABLE 2

LOCAL METEOROLIGICAL DATA

SAMPLING DATE: 8 September 1998

Time	Barometric Pressure (in Hg)	Temperature (F)	Dewpoint (F)	Wind Direction (from)	Wind Speed (knots)	Observation
0600	30.08	55	49	North	5	Mostly Sunny
0700	30.11	55	49	North	5	Mostly Sunny
0800	30.14	55	49	CALM	--	CLEAR
0900	30.15	59	49	North	3	SUNNY
1000	30.17	62	49	CALM	--	SUNNY
1100	30.18	66	47	CALM	--	SUNNY
1200	30.18	70	44	Northwest	9	Mostly Sunny
1300	30.16	71	45	Variable	3	Mostly Sunny
1400	30.14	73	45	North	7	Mostly Sunny
1500	30.12	74	44	Variable	5	Mostly Sunny
1600	30.11	74	44	Northeast	8	Mostly Sunny
1700	30.11	76	43	Northeast	8	Mostly Sunny

Source: National Weather Service, Louisville, Ky.

TABLE 3

TO-14 DATA SUMMARY FOR GAS MONITORING WELL SAMPLES AT THE LEE'S LANE LANDFILL LOUISVILLE, KENTUCKY

SAMPLING DATE: 8 September 1998

	Well Samples						
Sample ID	G1	G2	G3	G4	G5-L	G5-R	BLANK
Canister ID	RA2401	RA2062	RA2030	RA2028	RA2038	RA2072	RA2035
Dilution Factor	0.4089	0.4014	0.4027	0.3806	0.3637	0.3951	0.3754
Orifice	D104	D3	B1	D8	D6	D33	N/A
Compound (ppbV)							
Benzene	0.58	0.26	0.28	0.03	0.23	0.10	0.02
Methylene chloride	23.2	17.6	0.20	0.13	1.51	0.20	1.05
Toluene	12.7	1.49	0.93	0.28	0.55	2.25	0.12
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	34.6	20.5	3.26	ND	2.50	0.25	ND
Methane (ppmV)	2.075 *	7.27	7.46	5.70	7.32	4.61	1.11

* Reported in percent(%) by TCD Analysis